**ABSTRACT** 

A measuring gage for determining the thickness of a non-metallic material utilizes an inductive sensor positioned on one side of the material to be measured and a metallic object placed on the opposite side. The output of the sensor is used to determine the distance between the sensor and the metallic object, and hence the thickness of the material. The movement of the sensor and the metallic object can be computer controlled to map the thickness of the material along a predetermined path and produce a cross-sectional thickness profile. The output of the sensor can be used in conjunction with a computer controller responsible for adjusting the size of a score line to prepare an airbag deployment section in a vehicle trim panel.